

WHAT IS CLAIMED IS:

1. A method of resolving ambiguity comprising the steps of:  
determining recognized speech information;  
determining discourse functions in the recognized speech information;  
5 determining a predictive model of discourse functions based on  
prosodic features;  
determining at least one set of candidate discourse functions for the  
recognized speech information;  
determining a rank of the at least one set of discourse functions based  
10 on the predictive model of discourse functions; and  
resolving the ambiguity between the set of at least one discourse  
functions based on the determined rank.
2. The method of claim 1, wherein the discourse functions are determined  
based on a theory of discourse analysis.
- 15 3. The method of claim 2, in which the theory of discourse analysis is  
at least one of: the Linguistic Discourse Model; the Unified Linguistic  
Discourse Model; Rhetorical Structures Theory; Discourse Structure Theory;  
and Structured Discourse Representation Theory.
4. The method of claim 1, wherein the recognized speech information is  
20 directed to at least one of: a dictation mode; and a command mode.
5. The method of claim 1, in which the prosodic features occur in at least  
one of: a location preceding; within; and following the associated discourse  
function.
6. The method of claim 1, in which the prosodic features are encoded  
25 within a prosodic feature vector.
7. The method of claim 6, in which the prosodic feature vector is a  
multimodal feature vector.
8. The method of claim 1, in which the discourse function is an intra-  
sentential discourse function.
- 30 9. The method of claim 1, in which the discourse function is an inter-  
sentential discourse function.

10. A system for synthesizing speech using discourse function level prosodic features comprising:

an input/output circuit for retrieving recognized speech and prosodic features;

5 a processor that determines at least one set of candidate discourse functions in the recognized speech information; determines a predictive model of discourse functions; determines a rank of the at least one set of candidate discourse functions based on the predictive model of discourse functions and the prosodic features of the recognized speech and disambiguates between the  
10 at least one set of candidate discourse functions based on a measure of prosodic correlation between the prosodic features for the recognized speech and the expected prosodic features associated with each discourse function in the predictive model of discourse functions.

11. The system of claim 10, wherein the discourse functions are determined  
15 based on a theory of discourse analysis.

12. The system of claim 11, in which the theory of discourse analysis is at least one of: the Linguistic Discourse Model; the Unified Linguistic Discourse Model Rhetorical Structures Theory; Discourse Structure Theory; and Structured Discourse Representation Theory.

20 13. The system of claim 10, wherein the recognized speech information is directed to at least one of: a dictation mode; and a command mode.

14. The system of claim 10, in which the prosodic features occur in at least one of: a location preceding; within; and following the associated discourse function.

25 15. The system of claim 11, in which the prosodic features are encoded within a prosodic feature vector.

16. The system of claim 15, in which the prosodic feature vector is a multimodal feature vector.

30 17. The system of claim 11, in which the discourse function is an intra-sentential discourse function.

18. The system of claim 11, in which the discourse function is an inter-sentential discourse function.

19. Computer readable storage medium comprising: computer readable program code embodied on the computer readable storage medium, the computer readable program code usable to program a computer to resolve ambiguity comprising the steps of:

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determining recognized speech information;

determining discourse functions in the recognized speech information;

determining a predictive model of discourse functions based on prosodic features;

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determining at least one set of candidate discourse functions for the recognized speech information;

determining a rank of the at least one set of discourse functions based on the predictive model of discourse functions; and

resolving the ambiguity between the set of at least one discourse functions based on the determined rank.